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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,310	07/15/2005	Ying Zhinong	9342-68	1765
54414 7590 03/05/2007 MYERS BIGEL SIBLEY & SAJOVEC, P.A.			EXAMINER	
P.O. BOX 37428		LE, HOANGANH T		
RALEIGH, NC 27627		ART UNIT	PAPER NUMBER	
		2821		
SHORTENED STATUTORY PE	RIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTH	S	03/05/2007	2007 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

A)

Application No. Applicant(s) 10/542.310 ZHINONG, YING Office Action Summary Examiner **Art Unit** HoangAnh T. Le 2821 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply** A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). **Status** 1) Responsive to communication(s) filed on 26 December 2006. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. **Disposition of Claims** 4) Claim(s) <u>1-9</u> is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-9 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. _ 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Iwanan Hoanganh Le Primary Examiner Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. _

Paper No(s)/Mail Date _

☐ Information Disclosure Statement(s) (PTO/SB/08)

5) Notice of Informal Patent Application

6) Other:

DETAILED ACTION

1. The amendment filed on December 26, 2006 is acknowledged.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the loading resistor must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/542.310

Art Unit: 2821

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ying et al (the US 6,650,294, of record) in view of Ying (the US patent No. 6,166,694).

Regarding claims 1 and 9, the Ying et al reference ('294) teaches in figure 4B an antenna arrangement for a portable communication device, comprising: a first antenna patch (420) configured to be-connected to a first feeding potential, and a second antenna patch (410) configured to be connected to a second feeding potential, the antenna patches (410,420), comprising a variable capacitance feeding, wherein the first and second patches, are separated by a gap (445) and have lengths approximately equal to each other. The Ying et al reference ('294) also teaches in figure 4B a portable communication device comprising: a chassis having a microphone, a speaker opening and a keypad (col. 1, line 19, and col. 7, lines 10-18). The Ying et al reference ('294) fails to teach a loading resistor. However, the Ying reference ('694) teaches the use of a loading resistor to enhance the bandwidth of the antenna (see the abstract).

Since one of ordinary skill in the art would recognize the benefit of enhancing the bandwidth of the antenna, it would have been obvious to provide Ying et al ('294) with a loading resistor as taught by Ying ('694).

Application/Control Number: 10/542,310

Page 4

Art Unit: 2821

Regarding claim 2, wherein the gap (445) comprises dielectric or forming material (col. 8, lines 22-24, of Ying et al ('294)).

Regarding claim 3, wherein the dielectric material has a low dielectric constant (col. 8, line 24, of Ying ('294)).

Regarding claim 4, wherein g the length of the gap (445) is between about 0.1 to about 0.3 % of a wavelength coming from/to a source (col. 10, line 44-col. 11, line 5 of Ying et al ('294)).

Regarding claim 5, wherein the second feeding potential is ground potential (figure 4B of Ying et al ('294)).

Regarding claim 6, wherein the antenna patches have lengths approaching a quarter wavelength at an operating frequency band (figure 4B).

Regarding claim 7, wherein the connection between the first feeding potential and the first antenna patch is screened (figure 4B).

Regarding claim 8, figure 4b shows a radio circuit 455 that is configured to connect the first antenna patch at an edge thereof the first feeding potential.

Response to Arguments

5. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Application/Control Number: 10/542,310

Art Unit: 2821

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Page 5

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/542,310

Art Unit: 2821

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Manganh Le Primary Examiner Page 6